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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,070	03/01/2004	Vladimir Kraz	1030981-991133	2990

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EXAMINER
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SUAREZ, FELIX E

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/791,070

Applicant(s)

KRAZ, VLADIMIR

Examiner

Felix E. Suarez

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 76-94 and 97-100 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 76-94 and 97-100 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 March 0104 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/24 Nov 2004</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 76-83, 91-94 and 97-100 are rejected under 35 U.S.C. 103(a) as being anticipated over Hsiung et al. (U.S. Patent Application Publication No. 2003/0109951) in view of Grimes (U.S. Patent No. 6,359,444).

With respect to claims 76, 92, 97 and 99, Hsiung et al. (hereafter Hsiung) teaches a device for in-situ measurement and recording of at least one environmental parameter, said device comprising:

a data logger coupled to said sensor for receiving and logging said sensor output (see page 27, paragraphs [0381]-[0382]);

a communication module for communicating said sensor output (see page 3, paragraphs [0030]-[0032]).

Hsiung does not teach

a portable single unit that may be attaches to an object; nor

the portable single unit further comprising a sensor for detecting said parameter and converting to a sensor output (see page 8, paragraphs [0081]-[0082] and page 10 paragraph [0128]).

But Grimes teaches that a versatile sensing apparatus can be used for operation within a wide range of testing environments such as biomedical applications (see Grimes; col. 5, lines 31-48).

Grimes also teach that several sensors may be incorporated into an array to provide a package of sensing information about an environment (see Grimes; col. 6, lines 5-10).

Grimes further teaches a receiving unit, especially; if intended for portable-field use; may include a battery coupled to a timing circuit allowing a transmission coil/antenna to emit a series of electromagnetic pulses (see; Grimes col. 8, lines 59-63).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hsiung to include the versatile sensing apparatus as taught by Grimes, Because the versatile sensing apparatus of Grimes is constructed with a structural design flexibility and the sensor may be formed into many different shapes and may be fabricated as a micro-circuit for use where space is limited (see; Grimes; col. 5, lines 54-59); the versatile sensing apparatus include a receiver capable of measuring a plurality of successive environmental values; and the receiving unit, can be a potable-field use unit; as desired.

With respect to claims 77 and 93, Hsiung in combination with Grimes teaches all the features of the claimed invention, and Hsiung further teaches said data logger comprises a timestamping module for recording a timestamp with said sensor output (see Hsiung; page 27 paragraph [0382] and page 38, paragraphs [0471]-[0472]).

With respect to claim 78, Hsiung in combination with Grimes teaches all the features of the claimed invention, and Hsiung further teaches, said communication module comprises a transmitter and a receiver (see Hsiung; page 3 paragraph [0030]).

With respect to claims 79, 98 and 100, Hsiung in combination with Grimes teaches all the features of the claimed invention, and Hsiung further teaches said communication module comprises an RF (radio frequency) communication module (see Hsiung; page 3 paragraph [0028]).

With respect to claim 80, Hsiung in combination with Grimes teaches all the features of the claimed invention, and Hsiung further teaches comprising a display device (see Hsiung; page 3 paragraph [0032] and page 5 paragraph [0051]).

With respect to claim 81, Hsiung in combination with Grimes teaches all the features of the claimed invention, and Hsiung further teaches, said sensor is configured to detect a presence of electrostatic field (see Hsiung; page 8 paragraph [0082]).

With respect to claim 82, Hsiung in combination with Grimes teaches all the features of the claimed invention, and Hsiung further teaches said sensor is configured to measure a magnitude of said electrostatic field (see Hsiung; page 8 paragraph [0082] and page 10, paragraphs [0128]-[0129]).

With respect to claim 83, Hsiung in combination with Grimes teaches all the features of the claimed invention, and Hsiung further teaches said sensor is configured to detect a change in said electrostatic field (see Hsiung; page 13 paragraph [0159]).

With respect to claim 91 and 94, Hsiung in combination with Grimes teaches all the features of the claimed invention, and Hsiung further teaches said portable single unit moves through at least one of a manufacturing, storage, and transit process while attached to the object (see Hsiung; page 3 paragraph [0032]).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 84-90, are rejected under 35 U.S.C. 103(a) as being anticipated over Hsiung et al. (U.S. Patent Application Publication No. 2003/0109951) in view of Grimes (U.S. Patent No. 6,359,444) and Castleman (U.S. Patent No 6,518,574).

With respect to claim 84, Hsiung in combination with Grimes teaches all the features of the claimed invention, except that Hsiung in combination with Grimes does not teach said sensor is configured to detect an electrostatic discharge.

But Castleman teaches in a fire detector with multiple sensors that, conventional flame detectors using ultraviolet (UV) sensors also exist. Flame detectors with UV sensors may be sensitive to electrostatic spray gun flashes and corona discharges from waterborne coatings (see Castleman; col. 3, lines 40-56 and col. 7, lines 7-49).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hsiung in combination with Grimes to include a fire detector with multiple sensors as taught by Castleman, Because the fire detector with multiple sensors of Castleman allows to detect a electrostatic discharge with ultraviolet sensors.

With respect to claim 85, Hsiung in combination with Grimes and Castleman teaches all the features of the claimed invention, and Hsiung further teaches said sensor is configured to measure a magnitude of said electrostatic discharge (see page 8 paragraph [0082] and page 10, paragraphs [0128]-[0129]).

With respect to claims 86 and 87, Hsiung in combination with Grimes teaches all the features of the claimed invention, except that Hsiung in combination with Grimes does not teach said data logger comprises an analog to digital converter (ADC) to convert said sensor output into digital data.

But Castleman in a fire detector with multiple sensors that, in addition to the sensor array, the flame detector may include an analog to digital (A/D) converter, which receives a continuous stream of analog sensor signals from each of the sensors of the sensor array, and converts the analog signals into digital signals for storage and selective processing by a microprocessor or a controller, or both (see Castleman; col. 14, lines 55-61).



It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Hsiung in combination with Grimes to include a fire detector with multiple sensors as taught by Castleman, Because the fire detector with multiple sensors of Castleman allows to include an analog to digital (A/D) converter, to receive a continuous stream of analog sensor signals from each of the sensors of the sensor array, and converts the analog signals into digital signals for storage and selective processing by a microprocessor.

With respect to claim 88, Hsiung in combination with Grimes and Castleman teaches all the features of the claimed invention, and Hsiung further teaches comprising means for communicating said sensor output (see Hsiung; page 3, paragraphs [0030]-[0032]).

With respect to claim 89, Hsiung in combination with Grimes and Castleman teaches all the features of the claimed invention, and Hsiung further teaches said means for communicating comprises a transmitter and a receiver (see Hsiung; page 3 paragraph [0030]).

With respect to claim 90, Hsiung in combination with Grimes and Castleman teaches all the features of the claimed invention, and Hsiung further

teaches comprising an RF (radio frequency) communication module (see Hsiung; page 3 paragraph [0028]).

### ***Response to Arguments***

3. This action is responsive to papers filed 24 November 2004.

4. Applicant's arguments filed 24 November 2004 have been fully considered but they are not persuasive respect to independent claims 76 and 92. The Examiner has thoroughly reviewed applicant arguments, but believes the cited references to reasonably and properly meet the claimed limitations.

The invention is a device for in-situ measurement and recording of at least one environmental parameter.

Applicant claims a portable single unit that may be attached to an object. The Examiner rejects claims 76-94 and 97-100 in view of the newly discovered reference to Grimes (U.S. Patent No. 6,359,444)

### ***Conclusion***

#### ***Prior Art***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rose-Pehrsson et al. [U.S. Patent No. 5,469,369] describes sensing an unknown pattern vector.

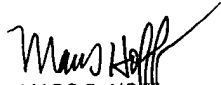
Hoigaard [U.S. Patent No. 5,083,117] describes a apparatus for monitoring and controlling electrostatic discharge.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix Suarez, whose telephone number is (571) 272-2223. The examiner can normally be reached on weekdays from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on (571) 272-2216. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306 for regular communications and for After Final communications.

February 22, 2005

F.S.

  
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